June 15, 2004

Mr. Rusty Birchall Project Manager Cone & Graham, Inc. 5201 Cone Road Tampa, Florida 33610 Mr. Barry Wilson Project Engineer Genesis CE&I Services, LLC 14161 SR-54 Odessa, Florida 33556

Ref: FPN: 256337 1 52 01; Contract No. 21591, SR-54 From E of Gunn Hwy to W of North Suncoast Parkway, DRB Hearing concerning Existing Asphalt Thickness/Loss of Use of Limerock Material.

Gentleman:

The Florida Department of Transportation (Department) and their Construction, Engineering and Inspection (CE&I) firm, Genesis CE&I Services, LLC (Genesis) and the Contractor on this project, Cone & Graham, Inc. (Cone Graham) requested a hearing before the Disputes Review Board (Board) to determine if Cone Graham is entitled to additional compensation to mill, load and haul asphalt base materials from the existing roadway, and are they entitled to additional compensation for replacement limerock material which they anticipated salvaging from beneath the existing roadway.

Cone Graham in their position paper states: "Cone & Graham, Inc. has requested additional compensation for unforeseen work of milling existing asphalt pavement in excess of 4" thick in several locations on the project and the resulting loss of use of limerock material created when it was discovered that there was no limerock below the asphalt."

The Department states: "The Contractor believes that he has incurred additional costs and is entitled to additional compensation because it is a Differing Site Condition. The Department does not believe that this constitutes a Differing Site Condition and therefore the Contractor is not entitled to additional compensation.."

A hearing was held in the Departments project office on June 4, 2004, to determine resolution of the above issue. The Board has not included any of the exhibits from either of the parties position papers or rebuttals, but has left the reference to those exhibits in the narratives.

CONTRACTORS POSITION

Statement of Issue

Cone & Graham, Inc. has requested additional compensation for unforeseen work of milling existing asphalt pavement in excess of 4" thick in several locations on the project and the resulting loss of use of limerock material created when it was discovered that there was no limerock below the asphalt. Costs included in this request were the

additional milling of overdepth asphalt, hauling and disposing of the milled material, and loss of use and replacement of limerock material that Cone & Graham, Inc. expected would have been available for use as stabilizer. The Department has denied this request. Cone & Graham, Inc. is requesting a ruling from the Disputes Review Board to determine if Cone & Graham, Inc. is entitled to additional compensation for the work described.

Cone & Graham, Inc.'s Position

Cone & Graham, Inc. intends to support its position for additional compensation on this issue through four main points: 1) That the field conditions resulted in a differing site condition that is eligible for additional compensation according to Specification Section 4-3.7, Differing Site Conditions; 2) Evidence from past FDOT projects where similar instances have occurred and were compensated for as extra work by FDOT; 3) DRB rulings on FDOT projects where similar instances have occurred; and 4) FDOT had superior knowledge of existing subsurface conditions that were not provided.

1. Differing Site Conditions

Standard Specification 4-3.7, Differing Site Conditions, states the following,

"During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered. and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the Contractor disturbs the conditions or performs the affected work.

Upon receipt of written notification of differing site conditions from the Contractor, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly. The Engineer will notify the Contractor whether or not an adjustment of the Contract is warranted

The Engineer will not allow a Contract adjustment for a differing site condition unless the Contractor has provided the required written notice.

The Engineer will not allow a Contract adjustment under this clause for any effects caused to any other Department or non-Department projects on which the Contractor may be working."

During the removal of the existing roadway, Cone & Graham, Inc. encountered existing asphalt thickness that was well in excess of what is ordinarily encountered and generally recognized as inherent in the work. Asphalt thickness encountered during removal was as thick as 0.28 meters (11.02 inches). The following two figures are representative of the variability and depth of asphalt removal required on the project. Complete cross section data is included in the attachments to this package (Attachment 7).

The contract plans did not provide any information regarding the thickness of the existing asphalt, therefore Cone & Graham, Inc. must make an assumption at bid time based on what is "ordinarily encountered and generally recognized as inherent in the work." Based on our experience removing exiting roadways on FDOT projects, drawing specifically on our experience on SR-54 and US-41, Cone & Graham, Inc. assumed an asphalt thickness of 0. IO meters (4 inches). The cost to remove this asphalt is included in the clearing and grubbing pay item. Upon encountering existing asphalt in excess of this, Cone & Graham, Inc. notified the Department of the differing site condition and advised them of our intent to file a claim. Cone & Graham, Inc. incurred additional costs due to this extra depth milling as further described below.

- a. The extra depth asphalt increased the cost of removal above what was bid by increasing the time required remove the existing asphalt. As a result, Cone & Graham, Inc. was charged additional cost by our milling subcontractor.
- b. The profile of the existing asphalt was extremely irregular, varying in depth by 0.16 meters (6.3 inches) across a single cross section. This irregularity prevented complete removal by milling and required Cone & Graham, Inc. to remove the remainder of the asphalt with loaders and backhoes. This removal is more costly than the planned milling operation.
- c. The increased time required to mill and remove the asphalt required additional trucking costs.
- d. The additional depth of asphalt above and beyond that expected at bid time increased the amount of milled material to be disposed. Cone & Graham, Inc. incurred additional costs hauling and disposing of the milled material off of the project.

Additionally, Cone & Graham, Inc. assumes that there will be limerock material available beneath the existing roadway for use a stabilizer material on the project unless the contract indicates otherwise. This is what is "ordinarily encountered and generally recognized as inherent in the work." As a result of the thickness of the asphalt encountered, and due to the variable thickness across the cross section, Cone & Graham, Inc. recovered no limerock material for use in the stabilizing of the new roadway within the sections included in the claim. This created additional cost for Cone & Graham, Inc. as described below.

- a. Cone & Graham, Inc. had to purchase limerock material for stabilizing in excess of that assumed at bid time from a commercial source.
- b. Cone & Graham, Inc. had to pay freight to transport this additional limerock material to the project.

For this project, Cone & Graham, Inc. assumed the purchase and transport of approximately 30,000 tons of limerock material for stabilizer purposes. This assumption is based on recovering enough limerock from the existing roadway to utilize for 50% of the stabilizing requirement spread at a thickness of approximately 5 inches. The loss of limerock material in the areas where full depth asphalt was encountered required Cone & Graham, Inc. to purchase and haul the material to make up for the on-site shortfall.

It is Cone & Graham, Inc.'s position that the conditions that existed in the field constitute a differing site condition than those expected at bid time. The thickness of the asphalt, the variable thickness across the cross section and the loss of expected limerock beneath the existing asphalt are all unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and inherent in the work. Therefore, Cone & Graham, Inc. is entitled to additional compensation for the removal of the extra depth asphalt and the replacement of the displaced limerock material that would have ordinarily been recovered for on-site use.

2. Experience From Past FDOT Projects

Cone & Graham, Inc. has been compensated, as extra work, when situations similar to this have occurred on past FDOT projects. As an example, we are providing documentation from two of Cone & Graham, Inc.'s past projects.

The first is our SR-436 project in District 5 (FPN 239255-1-52-01). On this project, Cone & Graham, Inc. encountered asphalt and soil cement as thick as 20 inches. The presence of this material was not anticipated, and the Department compensated Cone & Graham, Inc. for the removal of the extra depth asphalt and soil cement and for the replacement of the excavated volume. Attached to this package is a letter that contains FDOT's CEI Executive Summary (Attachment 1) on the issue and the resultant Supplemental Agreements (Attachments 2 & 3) that compensated Cone & Graham, Inc. for the additional work.

The second project was Cone & Graham, Inc.'s project on US-41 in Hillsborough County. On this project, an area of existing asphalt that was removed was 25" thick. The Department recognized that 21" of this removal was above and beyond what could have reasonably been expected. This is "Issue D" on Attachment B of the attached Supplemental Agreement (Attachment 4).

3. DRB Ruling From Past FDOT Project

Cone & Graham, Inc. has included in this package a DRB ruling on a past FDOT project in the Turnpike district (Attachment 5). In this case, the Contractor removed existing shoulders to construct additional lanes and new shoulders. The existing shoulders were actually constructed of full depth asphalt. The contractor filed a claim for the removal of the full depth asphalt and the replacement of the anticipated limerock that was not available. The Board ruled in the Contractor's favor.

4. FDOT Had Superior Knowledge

It is important to consider which party was best able to provide the information necessary to allow the contractor to make valid assumptions with regard to the existing conditions on the project. The Department had superior knowledge regarding the construction techniques and materials utilized to construct the existing roadway. They owned and managed the various widening projects that occurred on SR-54 prior to this project. The

Department did not provide the contractor with any as-built information with regard to the composition of the existing road, and made no effort to disclose a latent subsurface condition that would certainly impact the cost of the work. The Department did not provide core results on the existing road to allow the contractor to make assumptions regarding the thickness of asphalt or existence of limerock material beneath it.

It certainly would not have been practical to expect bidding contractors to core the roadway prior to the project bidding for their own information due to the high volume of traffic and the inconvenience to the public. It is unlikely that FDOT would have permitted several different contractors to core the road in several different locations at different times. However, assume for a moment if several contractors had done so. First of all, it is probable that the cores would not have necessarily been representative of the field conditions due to the variable nature of the cross sections. One contractor may have cored and area where the asphalt was only 6" thick, while another where it was 10" thick. These two contractors would have drastically different bids for removal. In order to assure uniform assumptions at bid time, the Department should be responsible for providing information that all contractors use to figure their cost. They are best suited to provide this information. Even if their information is inaccurate, it provides an equal basis for the contractors to bid.

As it stands now, the Department is unfairly benefiting from the latent physical condition that existed on the project. They received the benefit of Cone & Graham, Inc.'s bid assumption that there would be 4" asphalt removal and a 10" limerock recovery. Our costs to clear and grub the project and to provide Type B stabilization are based on these assumptions, and are clearly lower than the actual cost to do such work based on actual field conditions. Cone & Graham, Inc. is only requesting to recover costs above the reasonable assumptions made at bid time. Had the Department included accurate subsurface information prior to bid, these same costs would have been included in our, and the other contractors', bid.

In summary, Cone & Graham, Inc. maintains that we are entitled to additional compensation for this issue for the following reasons:

- 1. The actual field conditions represent a differing site condition due to latent, subsurface conditions that could not have been anticipated prior to the bid, and these conditions were of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.
- 2. Cone & Graham, Inc. has been compensated for extra work under similar situations on previous FDOT projects.
- 3. An analogous issue was brought before a Dispute Review Board on a Turnpike Project and entitlement was granted to the contractor.
- 4. The Department was the party best able to provide the information necessary upon which to base a bid, but did not provide this information.

During Cone Graham's rebuttal they made the following points:

- 1. There was no information in the plans concerning the thickness of the asphalt in the existing road. Therefore the bidding Contractors had to make an assumption concerning the thickness, which Cone Graham did. Their assumption was based upon what they had found while constructing approximately 27 miles of SR-54 and US-41 in Hillsborough County. The SR-54 work was adjacent to this project.
- 2. During the construction of SR-54 from the Suncoast Parkway to US-41 they had not found any black base.
- 3. Cone Graham's bid price for the stabilizer was higher than the state average because they had included more limerock in the stabilization cost.
- 4. Cone Graham bid using limerock base to keep their price for the project lower and to be competitive with the other bidders.
- 5. The Department encourages the use of existing limerock base as a stabilizer, again to keep the total project price down.

DEPARTMENTS POSITION

Issue:

Additional Milling and Loss of Limerock Materials for Use as Stabilization:

The dispute at hand is one of Contractual merit and/or entitlement. Is the Contractor entitled to additional compensation to mill, load and haul asphalt base materials from the existing roadway? Is the Contractor entitled to additional compensation for replacement limerock material that he allegedly anticipated salvaging from beneath the existing roadway?

The matter in dispute is the Contractor's Claim of a Differing Site Condition associated with the milling of asphalt base, hauling/disposing of the milled material and the loss of use of allegedly anticipated limerock materials to be used for stabilization. The Contractor believes that he has incurred additional costs and is entitled to additional compensation because it is a Differing Site Condition. The Department does not believe that this constitutes a Differing Site Condition and therefore the Contractor is not entitled to additional compensation.

Status:

The escalation matrix established at the beginning of the project was followed. At the last meeting regarding this issue both parties, the Department and the Contractor, agreed to refer this matter to the Disputes Review Board.

Summary of Department's Position

The Department's position is outlined below:

1. It is the Contractor's responsibility to examine the plans and the site of the proposed work as specifically required by Article 2-4 of the Supplemental Specifications which states: "Examine the Contract Documents and the site of the proposed work carefully before submitting a proposal for the work contemplated. Investigate the conditions to be encountered, as the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract Documents."

The Contractor has asserted that his bid assumption was to recover an average of 10" of limerock from beneath the existing roadway and to utilize the material for stabilizing. The Contractor's position appears to be just that - an assumption subject to his own risk and not the Department's. Especially since the Contractor did not provide any evidence to indicate that he expended reasonable efforts to validate his assumption prior to bid. This was an aggressive bid assumption and the risk associated with such assumptions should remain the responsibility of the bidder. Nowhere in the plans did the Department state either the thickness of the base or the composition of the base. [See Supplemental Specifications Article 2-4 (Exhibit 4-1 thru 4-5)]

2. The contract documents do not provide any information pertaining to the composition of the existing pavement. Article 4-3.7 of the Supplemental Specifications defines Differing Site Conditions as "subsurface or latent physical conditions encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site." [See Supplemental Specifications Article 4-3 (Exhibit 4-8 tlii-u 4-14)]

Standard Index 514 of the Roadway and Traffic Design Standards is presented as evidence that various different base groups are used throughout the State of Florida as optional bases. The roadway bases most utilized are limerock, shell, shell rock, graded aggregate, asphalt, rap and soil cement. Asphalt base is one of the optional base materials provided to contractors and is commonly used. In addition, a sphalt base is commonly used in areas where ground water or nearby water features may influence moisture in the base. With the numerous cypress heads / wetlands adjacent to SR 54 coupled with highly fluctuating groundwater tables, the existing SR 54 pavement would have been a prime candidate for the use of asphalt base and a reasonable Contractor would have made this assumption. [(See Standard Index 514 (Exhibit 3-1 thru 3-2)]

In this situation, there is no differing site condition because the physical conditions encountered on the project are not different from those indicated in the contract

documents and the "...physical conditions are not of an unusual nature differing materially from those ordinarily encountered and generally recognized...".

- 3. Section 160 of the Standard Specifications for Road and Bridge Construction is provided as evidence of the intent of the Contract.
 - a. The first sentence of Section 160-2 states "For stabilized subgrade, the Contractor may choose the type of material, Commercial or Local." The first sentence of the third paragraph of this same section states "The Contractor is responsible to make the finished roadbed section meet the bearing value requirements, regardless of the quantity of stabilizing materials necessary to be added."
 - b. The first sentence of Section 160-4.2 states "When the use of materials from an existing base is required as all, or a portion, of the stabilizing additive, the Engineer will direct the location, placement, and distribution of such materials."
 - c. The second paragraph of Section 160-5.2 states "When materials from an existing base are to be used in the stabilizing at a particular location, place and spread all of such materials prior to the addition of other stabilizing additives."
 - d. Section 160-10.1 states "Type B Stabilization and Type C Stabilization: Price and payment will constitute full compensation for all work specified in this Section applicable to these types of Stabilization, including furnishing and spreading of all stabilizing material required and any reprocessing of stabilization areas necessary to attain the specified bearing value."
 - e. The second paragraph of Section 160-10.3 states "No separate p ayment win be made for any commercial stabilizing material which the Contractor may elect to use in Type B or Type C Stabilization." The third paragraph of Section 160-10.3 states: "No separate payment will be made for the work of using materials from an existing base, in the stabilizing section."
 - f. The first paragraph of Section 160-10.4 states: "The above prices and payments will constitute full compensation for all work and materials specified in this Section, specifically including all costs of the processing and incorporation of existing base materials into the proposed stabilization area when such work is required by the plans."

The various quotes that we have presented from Section 160 clearly indicate the follow pattern as to the intent of the specification:

- a. It is the Contractor's sole responsibility to select the type of material (commercial or local) to be used for the stabilized subgrade so that bearing values are achieved.
- b. The incorporation of existing base materials into the stabilizing, if required by the Department, will be clearly identified in the plans.
- c. That compensation for the Type B stabilization includes all work and materials to achieve the necessary results.

The Plans and Contract Documents for this project did not contain a requirement that the Contractor incorporate existing base into the proposed stabilization. In as much, the CEI and Department did not direct the location, placement or distribution of existing

materials. Therefore any decisions as to the quantity or quality of stabilizing materials (local or commercial) were those of the Contractor. [See Standard Specifications (Exhibit 4-15 thru 4-18)]

- 4. Based on a comparison of average unit cost, there is no sustainable evidence that the Contractor was damaged. The Contract unit cost for Pay Item No. 2160-4-79, Stabilization, Type B was \$2.90 / square meter. The District 7 district wide average unit cost for this pay item is \$1.79 / square meter. The state wide average unit cost for this pay item is \$2.23 / square meter. [See Stabilization Pay Item Costs (Exhibit 7-1 thru 7-3)].
- 5. The Contractor has contended that the asphalt base was a differing site condition, which could not have been reasonably anticipated at the time of bid. In a 1996 Circuit Court Case involving Anderson Columbia Co. Inc. vs. The Florida Department of Transportation the court ruled in favor of the Department. Section 2-4 & Section 4-3-4 of the Standard Specifications were cited in this case of Differing Site Conditions. The most important finding from this case which is pertinent to our issue is the portion at the top of Page 7 which cited other case law which states, that a differing site conditions clause will be "triggered only where an inaccurate representation is relied on, not where there has been no representation." [See Final Summary Judgment (Exhibit 8-1 thru 8-9)]
- 6. On December 9, 1999 the Disputes Review Board for State Contract No. 20186 heard an almost identical dispute for the Suncoast Parkway I Section 2A & 2B project. In this case the Contractor filed a differing site condition claim for encountering widening strips with a 6" asphalt concrete base. The Department denied the claim and required the Contractor resume work. After hearing the case the Board ruled in favor of the Department that encountering asphalt base under existing State Road 54 did not constitute an unusual condition. [See Disputes Review Board Rulings(Exhibit9-1)]

During the Departments rebuttal they made the following points:

- 1. FDOT acknowledges asphalt base was of varying thickness, but does not believe this is constitutes a differing site condition.
- 2. The contract plans did not require Cone Graham to incorporate the existing base into the subgrade.
- 3. FDOT allows use of asphalt base as an optional base material, therefore Cone Graham is aware of this and could have expected asphalt base, only.
- 4. FDOT acknowledges average statewide and district unit bid prices are less than Cone Graham bid price.

CONCLUSION

Based upon the fact that the Contract Documents did not provide any information regarding the composition of the existing base material on State Road 54, the Contractor finding asphalt base material does not meet the specified contractual criteria for a Differing Site Condition. The Contractor is NOT entitled to any additional compensation.

DISPUTES REVIEW BOARD FINDINGS

The contract plans were silent as to the depth of asphalt and/or limerock, in the existing roadway.

Cone Graham made the assumption at bid time that there would be 4" of asphalt and 10" of limerock base material in the portion of SR-54 to be removed.

This assumption was reasonable based upon similar work done adjacent to this project and on US-41 in the same general area.

The asphalt was thicker, from 5.5" to 11" (averaging approximately 4" thicker according to Cone Graham) and less limerock was available for stabilization. The Department did not take issue with this assessment of the average depth of asphalt.

Other DRB decisions were quoted by both parties favoring their positions. However, a recommendation, while instructive as to how one DRB viewed an issue, should not be considered as creating a precedent since specifications, plan notes and other elements are seldom the same. For instance, the Departments exhibit was for a section of SR 54 at the Suncoast Parkway where the shoulder had been widened, and as the DRB found a contractor could have a reasonable expectation of finding asphalt base in a narrow strip, such as shoulder widening.

A similar point can be made with respect to Court cases that seem to favor one side or the other. In the case used by the Department the contractor relied on its own inadequate investigation in assuming concrete piling and debris left over from the original construction. As discussed above Cone Graham made a reasonable assumption based on similar work they had completed in the area.

The contract, Section 4-3.4 Differing Site Condition, applies to the condition found on this project where it states part: "..., or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract are encountered ...".

DISPUTE REVIEW BOARD RECOMMENDATION

The Board finds that Cone & Graham, Inc. is entitled to compensation for the additional milling of over depth asphalt, hauling and disposing of the milled material, and loss of limerock material that would have been available for use as stabilizer.

The Board sincerely appreciates the cooperation of all parties and the information presented for its review in making this recommendation. The Disputes Review Board's recommendation should not prevent, or preclude, the parties from negotiating an equitable solution (should it be appropriate) to any issue pursuant to their partnering agreement.

Please remember that a response to the Board and the other party of your acceptance or rejection of the recommendation is required within 15 days. Failure to respond constitutes an acceptance of this recommendation by the non-responding party.

I certify that I have participated in all meetings of the Disputes Review Board regarding this issue and concur with the findings and recommendations.

Signed with the concurrence of all Board members

John C. Norton, P.E. Chairman Tom Rice Member Mark Puckett Member